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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,098	02/03/2004	Gaetan Leclerc	2751-1A	2046

7590 08/23/2005  
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CANADA

EXAMINER

LUBY, MATTHEW D

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/771,098	LECLERC, GAETAN	
	Examiner	Art Unit	
	Matt Luby	3611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6, 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

The RCE filed 006/06/05 is accepted and the corresponding amendment filed therewith has been entered.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moll et al. (U.S. Patent No. 3,860,081) in view of Long et al. (U.S. Patent No. 6,367,570).

Moll et al. disclose a tractor trailer having essentially all elements as claimed, including a tractor unit and a trailer unit with drive wheels, the tractor unit having an internal combustion engine (1) operative to drive the drive wheels (col. 3, lines 15-19), the trailer unit having a plurality of axles each having wheels thereon, electric drive means comprising a plurality of electric motors (12, 13, 16, 17) for driving the wheels (see Fig. 1), a generator (2), and a control system for selectively operating drive means for driving the wheels. Moll et al. fail to explicitly disclose batteries operatively connected to the electric drive means, the

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batteries being mounted on the tractor unit and charged by the generator, and regenerative braking.

Long et al. disclose that it is known in the art to provide a hybrid vehicle with batteries (400) operatively connected to electric drive means as is old and well known in the hybrid vehicle art, and to provide the vehicle with regenerative braking.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the vehicle of Moll et al. with the rechargeable batteries and regenerative braking of Long et al. in order to improve the operability and efficiency of the vehicle as a whole. Although the vehicle of Moll et al. likely includes batteries "operatively connected" to the electric drive means, an assembly as taught by Long et al. to provide the motors power directly from batteries would provide, as taught in column 4, lines 59-60, "enhanced lean running for higher efficiency". Note that it further would have been obvious to mount the batteries on the tractor portion of the vehicle of Moll et al. because it supports all of the power components and electrical power is sent via line 9 to the trailer. Regenerative braking, taught specifically by Long et al. is also old and well known in the hybrid/electric vehicle art as a common means to conserve battery power, and therefore the explicit use of such would have been obvious to one of ordinary skill.

### ***Response to Arguments***

Applicant's arguments filed 06/06/05 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually (i.e., attacking the Moll et al. reference on p. 3 for not disclosing what Long et al. was used to teach and vice versa), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Long et al. has merely been used to show that it is notoriously well known in the art to provide a vehicle with a further hybrid form of power, i.e., from rechargeable batteries and to provide that vehicle with regenerative braking.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Luby whose telephone number is (571) 272-6648. The examiner can normally be reached on Monday-Friday, 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (571) 272-6612. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matt Luby  
Examiner  
Art Unit 3611

ml  
August 19, 2005